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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,185	10/20/2003	Cheng-Fang Hsiao	1496-941	6865
7590		09/12/2007		
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Houston, TX 77002				
			EXAMINER	
			NGUYEN, HONG VINH T	
			ART UNIT	PAPER NUMBER
			2834	
			MAIL DATE	DELIVERY MODE
			09/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/688,185

Applicant(s)

HSIAO, CHENG-FANG

Examiner

Hong-Vinh Nguyen

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>Draftsperson's Review</u> |

DETAILED ACTION

Specification

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Drawings

The drawings were received on 12/05/2006. These drawings are unacceptable per draftsman's review. Furthermore, the numerical label (4) for the **upper housing** is missing from Fig. 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hong et al. (US Pub. 2002/0125842 A1 hereinafter "Hong"), in view of Mayumi (US Pub. 2002/0140303 A1).

Hong discloses a vibration motor (100) comprising a housing (191);
a stator (110) mounted in said housing, said stator having a rotor mounting slot formed centrally therein; said stator having a series of pole teeth (115,116) formed thereon and facing toward said rotor mounting slot, said series of pole teeth arranged at an interval, said inner wall having a plurality of coil plates;

a rotor (120) mounted in said rotor mounting slot, said rotor having a magnetic cylindrical body (129) with an outer peripheral wall facing said inner wall of said stator, said rotor having a rotary disk support (124) disposed entirely in a hollow interior of said magnetic cylindrical body, said peripheral wall of said magnetic cylindrical body having a series of rotor pole pairs thereon, each of the rotor pole pairs having a north magnetic pole and a south magnetic pole, and

a rotary shaft (122) mounted in a center of said rotary disk support, said rotary disk support having a plurality of through holes extending therethrough (127C Col. 7 line 29-30), said plurality of through holes being distributed unevenly so as to cause said rotor to have an unbalanced vibratory rotation (see Hong Fig. 1).

Hong discloses the claimed invention except for the stator having an inner wall entirely surrounding the rotor mounting slot and having a plurality of coil plates forming annular slots with a coil contact extending outwardly of said annular slots, said pole teeth being in electromagnetic contact with said coil contact. However, Mayumi discloses a motor stator having an inner wall (22a-23b) entirely surrounding the rotor mounting slot and having a plurality of coil plates (20a-21b) forming annular slots with a coil contact (30a-b) extending outwardly of said annular slots, said pole teeth being in electromagnetic contact with said coil contact. It would be obvious for a person having ordinary skill in the art at the time of the invention to combine the teachings of Hong and Mayumi to enable the spacing between the rotor and stator to be small and uniform, leading to increase in efficiency of the motor. It would also be easier to provide a contact to the terminals if the coil contact is projected outward away from the yoke.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Renkle et al. (US 4,381,465), Miyazawa et al. (US 5,598,046), Inariba (US 4,695,419), Inariba (US 4,052,630).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong-Vinh Nguyen whose telephone number is (571) 270 1743. The examiner can normally be reached on Monday through Friday 8 am to 5 pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HVN
8/30/2007

ERIN SCHUBERT
SOFTWARE PATENT EXAMINER
TECHNOLOGY CENTER 2001